Statement of Basis of the Federal Operating Permit

LyondellBasell Acetyls, LLC

Site Name: La Porte Plant - Acetyls Area Area Name: La Porte Plant - Acetyls Physical Location: 1350 Miller Cut-Off Rd Nearest City: La Porte County: Harris

> Permit Number: O1375 Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869 SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;

A description of the revision project;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements:

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: May 10, 2017

Operating Permit Basis of Determination

Description of Revisions

The fugitive components, Unit ID Nos. AAFUG & VAMFUG, were updated in the Unit Summary and Applicable Requirements Summary tables to show that they are subject to 40 CFR Part 60, Subpart VVa. The issuance date for NSR 80295 was updated to include the recent NSR renewal in the New Source Review Authorization References table.

Permit Area Process Description

Vinyl Acetate Monomer (VAM) is produced by the reaction of ethylene, oxygen, and acetic acid in the presence of a catalyst in the reaction section which consist of three reaction trains operating independently and in parallel. The liquid component from the reactors is composed of VAM with a small amount of excess acetic acid and water. This liquid component is pumped to the purification system. The gaseous component of the reactor section is un-reacted ethylene. The unreacted ethylene is recovered and fed back into the reactors. The final product (vinyl acetate) is sent out via railcars, trucks and barges. The emissions from production equipment are controlled using water scrubbers, an elevated flare, and a catalytic oxidizer. All waste water from the process is sent to the wastewater treatment process to be treated prior to being released.

Glacial Acetic Acid (GAA) is produced from the continuous reaction of carbon monoxide (CO) and methanol in an agitated reactor operating at a moderate temperature and pressure. The liquid from the reactor is released to a flash tank and then recycled. The vapor from the flash tank is sent to a series of distillation columns and decanters all designed to separate acetic acid for any unreacted raw materials. All unreacted raw material is sent back to the reactor. All acetic acid is purified and sent to storage as a final product. The final product (acetic acid) is sent out via railcars, trucks, barges, or consumed in the Vinyl Acetate unit. The emissions from production equipment are controlled using water scrubbers, caustic scrubber or an elevated flare. All waste water from the process is sent to the wastewater treatment process to be treated prior to being released.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, PM, NOX, HAPS, CO	

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - o New Source Review Authorization Requirements
 - Compliance Requirements
 - o Protection of Stratosphere Ozone
 - o Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - o Compliance Plan
 - Alternative Requirements
- Appendix A
 - o Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the

requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995,

that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.
- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.

- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- 25. Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit

attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
PWW5206	30 TAC Chapter 117, Subchapter B	R7300-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
PWW5206	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-3	Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Stationary RICE Type = Compression ignition engine
PWW5259	30 TAC Chapter 117, Subchapter B	R7300-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
PWW5259	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-3	Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Stationary RICE Type = Compression ignition engine
AAV5118	30 TAC Chapter 115, Storage of VOCs	R5112-6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
AAV5118	40 CFR Part 60, Subpart Kb	60Kb-2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia Storage Vessel Description = Emission controls not required (fixed roof)
AAV5129	30 TAC Chapter 115, Storage of VOCs	R5112-6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
AAV5129	40 CFR Part 60, Subpart Kb	60Kb-2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia Storage Vessel Description = Emission controls not required (fixed roof)

Unit ID	Regulation	Index Number	Basis of Determination*
AAV5204	30 TAC Chapter	AAV5204-P	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a vapor recovery system (VRS)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
			Control Device Type = Flare
AAV5204	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.
	Subpart G		NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
AAV5209	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
AAV5209	40 CFR Part 63, Subpart G	63G-2	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Liquid-mounted seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
AAV5210		R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
AAV5210	40 CFR Part 63, Subpart G	63G-2	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Liquid-mounted seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof

Unit ID	Regulation	Index Number	Basis of Determination*					
AAV5238	30 TAC Chapter 115, Storage of VOCs	R5112-6	Today's Date = Today's date is March 1, 2013 or later.					
			Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.					
			Tank Description = Tank does not require emission controls					
			True Vapor Pressure = True vapor pressure is less than 1.0 psia					
			Product Stored = VOC other than crude oil or condensate					
			Storage Capacity = Capacity is greater than 40,000 gallons					
AAV5244	30 TAC Chapter	R5112-1	Today's Date = Today's date is March 1, 2013 or later.					
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.					
			Tank Description = Tank using a vapor recovery system (VRS)					
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia					
			Product Stored = VOC other than crude oil or condensate					
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons					
			Control Device Type = Flare					
AAV5251	30 TAC Chapter 115, Storage of VOCs	115, Storage of	30 TAC Chapter		30 TAC Chapter	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
				Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.				
		True Vapor Pr	Tank Description = Tank does not require emission controls					
			True Vapor Pressure = True vapor pressure is less than 1.0 psia					
			Product Stored = VOC other than crude oil or condensate					
			Storage Capacity = Capacity is greater than 40,000 gallons					
AAV5251	40 CFR Part 60,	60Kb-2	Product Stored = Volatile organic liquid					
	Subpart Kb	Subpart Kb Storage Capaci	Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)					
			Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia					
			Storage Vessel Description = Emission controls not required (fixed roof)					
AAV5252	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.					
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.					
			Tank Description = Tank does not require emission controls					
			True Vapor Pressure = True vapor pressure is less than 1.0 psia					
			Product Stored = VOC other than crude oil or condensate					
			Storage Capacity = Capacity is greater than 40,000 gallons					
AAV5253	30 TAC Chapter	R5112-2	Today's Date = Today's date is March 1, 2013 or later.					
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.					
			Tank Description = Tank using a submerged fill pipe and vapor recovery system					

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
I			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
			Control Device Type = Flare
AAV5258	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
AAV5258	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.
	Subpart G		NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
AAV5287	30 TAC Chapter	R5112-2	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a submerged fill pipe and vapor recovery system
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
			Control Device Type = Flare
AAV5312	30 TAC Chapter		Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
AAV5312	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
AAV5315	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
AAV5315	40 CFR Part 60,	60Kb-2	Product Stored = Volatile organic liquid
	Subpart Kb		Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)
			Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia
			Storage Vessel Description = Emission controls not required (fixed roof)
VAV5112	30 TAC Chapter	R5112-5	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a submerged fill pipe
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
VAV5112	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.
	Subpart G		NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
VAV5117	_	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV5117	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
VAV5119	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV5412	30 TAC Chapter	R5112-1	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a vapor recovery system (VRS)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
			Control Device Type = Flare
VAV5412	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.
	Subpart G		NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
VAV5521	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV5521	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
VAV5532	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs	115, Storage of Alternate Control	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV5532	40 CFR Part 60,	60Kb-3	Product Stored = Volatile organic liquid
	Subpart Kb		Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)
			Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia

Unit ID	Regulation	Index Number	Basis of Determination*
VAV5560	30 TAC Chapter	R5112-4	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a submerged fill pipe and vapor recovery system
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
			Control Device Type = Flare
VAV5560	40 CFR Part 63, Subpart G	63G-4	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Bypass Lines = Closed vent system has no by-pass lines.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Control Device Type = Flare
			Emission Control Type = Closed vent system (CVS) and control device (fixed roof)
VAV573	_	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV573	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
		pter rof R5112-3 63, 63G-3 pter R5112-3	Emission Control Type = Internal floating roof
VAV574	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs	115, Storage of VOCs Alternate Control Requirement = Not using an a with applicable control requirements or exemp	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV574	40 CFR Part 63,	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart G		sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
VAV575	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV575	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
VAV576	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV576	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
VAV577	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV577	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
VAV578	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV579	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV580	30 TAC Chapter	R5112-7	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs	Alternate Control Requirement =	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
VAV580	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.
	Subpart G		NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
VAV584	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*		
			Storage Capacity = Capacity is greater than 40,000 gallons		
VAV585	30 TAC Chapter	R5112-6	Today's Date = Today's date is March 1, 2013 or later.		
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.		
			Tank Description = Tank does not require emission controls		
			True Vapor Pressure = True vapor pressure is less than 1.0 psia		
			Product Stored = VOC other than crude oil or condensate		
			Storage Capacity = Capacity is greater than 40,000 gallons		
VAV591	30 TAC Chapter	R5112-5	Today's Date = Today's date is March 1, 2013 or later.		
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.		
			Tank Description = Tank using a submerged fill pipe		
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia		
			Product Stored = VOC other than crude oil or condensate		
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons		
VAV591	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.		
	Subpart G		NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.		
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.		
VAV605	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.		
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.		
			Tank Description = Tank using an internal floating roof (IFR)		
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia		
			Product Stored = VOC other than crude oil or condensate		
					Storage Capacity = Capacity is greater than 40,000 gallons
VAV605	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).		
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)		
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.		
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)		
			Emission Control Type = Internal floating roof		
VAV787	30 TAC Chapter	R5112-3	Today's Date = Today's date is March 1, 2013 or later.		
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.		
			Tank Description = Tank using an internal floating roof (IFR)		
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia		
			Product Stored = VOC other than crude oil or condensate		

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 40,000 gallons
VAV787	40 CFR Part 63, Subpart G	63G-3	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111) NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Internal floating roof
BARGELOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-4a	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
BARGELOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-4b	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Marine Terminal Exemptions = The marine terminal is claiming one or more of the exemptions in 30 TAC § 115.217(a)(5)(B). Transfer Type = Only loading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. VOC Flash Point = Flash point less than 150° F. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(B), (b)(3)(B), (a)(2)(A), and (b)(3)(A) exemptions do not apply to marine terminals or gasoline terminals. Uncontrolled VOC Emissions = Uncontrolled VOC emissions are less than 100 tpy.
BARGELOAD	40 CFR Part 63, Subpart Y	63Y-1	Subpart Y Facility Type = Existing onshore loading terminal (located onshore or less than 0.5 miles from shore). Ballasting Operations = Operations other than or in addition to ballasting operations are performed at the facility. Vapor Pressure = Vapor pressure is greater than or equal to 10.3 kilopascals (1.5 psia) at standard conditions, 20° C and 760 mm Hg. Subpart BB Applicability = Marine vessel loading operations are not subject to and complying with 40 CFR Part 61, Subpart BB. Material Loaded = Material other than crude oil or gasoline. HAP Impurities Only = Marine vessel loading operations at loading berths transfer liquids containing organic hazardous air pollutants other than as impurities. Source Emissions = Source with emissions less than 10 and 25 tons.
RAILLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-4	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.

Unit ID	Regulation	Index Number	Basis of Determination*
RAILLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	ng	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.
			Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only loading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
RAILLOAD	40 CFR Part 63, Subpart G	63G-5	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b).
			Control Device = Absorber.
			Halogenated Emissions = There are no halogenated emission streams from the transfer rack.
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR \S 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Title 40 § 63.128(h) Option = The transfer rack is complying with 40 CFR § 63.128(a) or (b).
			Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H.
			Shared Control Device = The control device is shared between transfer racks and process vents.
			Multiple Arms = Control device is shared between multiple arms loading simultaneously.
TALOAD	30 TAC Chapter	R5211-6	Chapter 115 Control Device Type = Vapor control system with a flare.
	115, Loading and Unloading	5, Loading	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
	or voc		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only loading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor balance system.

Unit ID	Regulation	Index Number	Basis of Determination*
TALOAD	30 TAC Chapter 115, Loading and Unloading of VOC		Chapter 115 Control Device Type = Vapor control system with a flare.
			Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
	or voc		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only loading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
TALOAD	40 CFR Part 63,	63G-6	Control Device = Flare.
	Subpart G		Halogenated Emissions = There are no halogenated emission streams from the transfer rack.
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H.
TRUCKLOAD	115, Loading	Unloading	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
	and Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
	or voc		Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only loading.
			True Vapor Pressure = True vapor pressure less than 0.5 psia.
TRUCKLOAD	30 TAC Chapter 115, Loading	R5211-5	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.
	and Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only loading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
TRUCKLOAD	40 CFR Part 63, Subpart G	63G-5	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b). Control Device = Absorber.
			Halogenated Emissions = There are no halogenated emission streams from the transfer rack.
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Title 40 § 63.128(h) Option = The transfer rack is complying with 40 CFR § 63.128(a) or (b).
			Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H.
			Shared Control Device = The control device is shared between transfer racks and process vents.
			Multiple Arms = Control device is shared between multiple arms loading simultaneously.
AAFLARE	30 TAC Chapter 111, Visible Emissions		Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
			Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
AAFLARE	40 CFR Part 60, Subpart A	,	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.
			Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR \S 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR \S 60.18(c)(4).
			Flare Assist Type = Steam-assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
AAFLARE	40 CFR Part 60,	60A-2	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.
	Subpart A	part A	Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).
			Flare Assist Type = Steam-assisted
			Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).
			Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
AAFLARE	40 CFR Part 63,	63A-FL	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	Subpart A		Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).
			Flare Assist Type = Steam assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
AAFLARE	40 CFR Part 63,	63A-FL2	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	Subpart A	opart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).
			Flare Assist Type = Steam assisted

Unit ID	Regulation	Index Number	Basis of Determination*
			Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).
			Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
QE6801U		R111-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	111, Visible Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
VAFLARE		R111-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	111, Visible Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
VAFLARE	30 TAC Chapter	R5722-001	Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d).
	115, HRVOC Vent Gas		Out of Service = Flare was not permanently out of service by April 1, 2006.
			Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.
			Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.
			Multi-Purpose Usage = Flare is used for abatement of emissions from marine loading or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.
			Alternative Monitoring = No alternative monitoring and test methods are used.
			Minor Modification = No minor modifications to the monitoring and test methods are used.
			Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.
			Flare Type = Flare is in multi-purpose service.
VAFLARE	40 CFR Part 63,	63A-FL	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	Subpart A		Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).
			Flare Assist Type = Steam assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
VAFLARE	40 CFR Part 63,	63A-FL2	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	Subpart A		Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).
			Flare Assist Type = Steam assisted
			Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).
			Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
AAFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
AAFUG	40 CFR Part 60, Subpart VVa	60VVa	Produces Chemicals = The facility produces, as an intermediate or final product, one or more of the chemicals listed in 40 CFR § 60.489a.
			Affected Facility = The facility is an affected facility as defined in 40 CFR § 60.480a(a)(2).
			Construction/Modification Date = After November 7, 2006.
			Compliance Option = Choosing to comply with the provisions of 40 CFR Part 63, Subpart H.

Unit ID	Regulation	Index Number	Basis of Determination*
AAFUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
VAMFUG	30 TAC Chapter	R5780-ALL	Agitators = The fugitive unit contains agitators.
	115, HRVOC Fugitive		Compressor Seals = The fugitive unit contains compressor seals.
	Emissions		Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.
			Process Drains = The fugitive unit contains process drains.
			Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves.
			Bypass Line Valves = The fugitive unit contains bypass line valves.
			Flanges or Other Connectors = The fugitive unit contains flanges or other connectors.
			Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators.
			Pressure Relief Valves = The fugitive unit contains pressure relief valves.
			Pump Seals = The fugitive unit contains pump seals.
VAMFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
VAMFUG	40 CFR Part 60, Subpart VVa		Produces Chemicals = The facility produces, as an intermediate or final product, one or more of the chemicals listed in 40 CFR § 60.489a.
			Affected Facility = The facility is an affected facility as defined in 40 CFR § 60.480a(a)(2).
			Construction/Modification Date = After November 7, 2006.
			Compliance Option = Choosing to comply with the provisions of 40 CFR Part 63, Subpart H.
VAMFUG	40 CFR Part 61,	61V-1	Vacuum Service = The fugitive unit does not contain components in vacuum service.
	Subpart V	art V	VHAP Service = The fugitive unit contains no components in VHAP service.
VAMFUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
AACT	30 TAC Chapter	TAC Chapter R5760-1 Cooling Tower	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.
	115, HRVOC Cooling Towers		Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.
	Cooming Towers		Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.
			Design Capacity = Design capacity to circulate 8000 gpm or greater.
			Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).
		115.764. Flow Monitoring/Testin	Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.
			Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § $115.764(a)(1)$, (b)(1), or (h)(1).
			Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).
			On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.

Unit ID	Regulation	Index Number	Basis of Determination*
VACT	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
AAFLAREV	30 TAC Chapter 115, Vent Gas Controls	R5121-6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
AAFLAREV	30 TAC Chapter 115, Vent Gas Controls	R5121-7	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
AAFLAREV	40 CFR Part 63, Subpart G	63G-2	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Flare

Unit ID	Regulation	Index Number	Basis of Determination*
			Overlap = Title 40 CFR Part 60, Subpart NNN
			Group 1 = The process vent meets the definition of a Group 1 process vent.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			Halogenated = Vent stream is not halogenated.
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
			Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) without calculating the TRE index value.
			Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
ANALYZER	30 TAC Chapter 115, Vent Gas	R5211-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
VAFLAREV	30 TAC Chapter 115, HRVOC Vent Gas		HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
			Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).
			Vent Gas Stream Control = Vent gas stream is controlled by a flare.
VAFLAREV	30 TAC Chapter	5, Vent Gas	Alternate Control Requirement = Alternate control is not used.
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
		Control Device Type = Smokeless fla	Control Device Type = Smokeless flare
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
VAFLAREV	30 TAC Chapter	R5121-5	Alternate Control Requirement = Alternate control is not used.
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.

Unit ID	Regulation	Index Number	Basis of Determination*
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
			Control Device Type = Smokeless flare
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
VAFLAREV	40 CFR Part 63, Subpart G	63G-2	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
			Control Device = Flare
			Overlap = Title 40 CFR Part 60, Subpart NNN
			Group $1 = $ The process vent meets the definition of a Group 1 process vent.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			Halogenated = Vent stream is not halogenated.
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
			Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) without calculating the TRE index value.
			Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
VAMCATOX	30 TAC Chapter	R5121-8	Alternate Control Requirement = Alternate control is not used.
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
			Control Device Type = Chiller or catalytic incinerator.
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
VAMCATOX	40 CFR Part 63, Subpart G	63G-3	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device = Catalytic incinerator.
			Overlap = Title 40 CFR Part 60, Subpart NNN
			Group $1 =$ The process vent meets the definition of a Group 1 process vent.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			Halogenated = Vent stream is not halogenated.
			By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device.
			Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value
			Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line.
			Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
VAV5174	30 TAC Chapter	R5722-2	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
	115, HRVOC Vent Gas		Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr).
			Exempt Date = The vent gas stream is not exempt.
VAV5174	30 TAC Chapter 115, Vent Gas		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
VAV5174	40 CFR Part 63,	,	Overlap = Title 40 CFR Part 63, Subpart G only
	Subpart G		Group 1 = The process vent is a Group 2 process vent.
			HAP Concentration = HAP concentration is less than to 50 ppm.
			Flow Rate = Flow rate is not needed to determine applicability.
VAV5175	30 TAC Chapter	R5722-2	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
	115, HRVOC Vent Gas	VOC	Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr).
			Exempt Date = The vent gas stream is not exempt.
VAV5175	30 TAC Chapter 115, Vent Gas	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.

Unit ID	Regulation	Index Number	Basis of Determination*		
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).		
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.		
VAV5175	40 CFR Part 63,	63G-1	Overlap = Title 40 CFR Part 63, Subpart G only		
	Subpart G		Group 1 = The process vent is a Group 2 process vent.		
			HAP Concentration = HAP concentration is less than to 50 ppm.		
			Flow Rate = Flow rate is not needed to determine applicability.		
DEGR1	30 TAC Chapter	R5412-1	Solvent Degreasing Machine Type = Cold solvent cleaning machine.		
	115, Degreasing Processes		Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.		
			Solvent Sprayed = A solvent is sprayed.		
			Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.		
			Solvent Heated = The solvent is not heated to a temperature greater than 120° F.		
			Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.		
			Drainage Area = Area is greater than or equal to 16 square inches.		
			Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.		
AAV5240	40 CFR Part 60, Subpart NNN			60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.
			Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.		
			Construction/Modification Date = After December 30, 1983.		
			TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.		
			Subpart NNN Control Device = Flare.		
			Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system.		
			Distillation Unit Type = Does not qualify for any exemption under \S 60.660(c)(1)-(3).		
			Total Design Capacity = 1 gigagram per year or greater.		
			Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.		
AAV5307	40 CFR Part 60, Subpart NNN	60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.		
			Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.		
		TOC Reduction weight-percen	Construction/Modification Date = After December 30, 1983.		
			TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.		
			Subpart NNN Control Device = Flare.		
			Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system.		

Unit ID	Regulation	Index Number	Basis of Determination*
			Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).
			Total Design Capacity = 1 gigagram per year or greater.
			Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
AAV5308	40 CFR Part 60, Subpart NNN	60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.
			Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.
			Construction/Modification Date = After December 30, 1983.
			TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.
			Subpart NNN Control Device = Flare.
			Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system.
			Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).
			Total Design Capacity = 1 gigagram per year or greater.
			Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
AAV5309	40 CFR Part 60, Subpart NNN	60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.
			Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.
			Construction/Modification Date = After December 30, 1983.
			TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.
			Subpart NNN Control Device = Flare.
			Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system.
			Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).
			Total Design Capacity = 1 gigagram per year or greater.
			Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
PRO-AA	40 CFR Part 63, Subpart F	63F-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).
			Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.
			Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.
			Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.
			Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.
			NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.
			Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR

Unit ID	Regulation	Index Number	Basis of Determination*
			§ 63.104(a)(4)(i) - (iv).
			Heat Exchange System = A heat exchange system is utilized.
			Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.
			Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.
			Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
PRO-VA	40 CFR Part 63, Subpart F	63F-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).
			Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.
			Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.
			Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.
			Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.
			NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.
			Meets 40 CFR $63.104(a)(4)(i)$ -(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR \S $63.104(a)(4)(i)$ - (iv).
			Heat Exchange System = A heat exchange system is utilized.
			Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.
			Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.
			Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

^{* -} The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification	For initial permit with application shield, can be issued
of an existing facility	after operation commences; significant revisions require
	approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not
	authorize new emissions
Ensures issued permits are protective of the	Applicable requirements listed in permit are used by
environment and human health by conducting a	the inspectors to ensure proper operation of the site as
health effects review and that requirement for	authorized. Ensures that adequate monitoring is in
best available control technology (BACT) is	place to allow compliance determination with the FOP.
implemented.	
Up to two Public notices may be required.	One public notice required. Opportunity for public
Opportunity for public comment and contested	comments. No contested case hearings.
case hearings for some authorizations.	
Applies to all point source emissions in the state.	Applies to all major sources and some non-major
	sources identified by the EPA.
Applies to facilities: a portion of site or	One or multiple FOPs cover the entire site (consists of
individual emission sources	multiple facilities)
Permits include terms and conditions under	Permits include terms and conditions that specify the
which the applicant must construct and operate	general operational requirements of the site; and also
its various equipment and processes on a facility	include codification of all applicable requirements for
basis.	emission units at the site.
Opportunity for EPA review for Federal	Opportunity for EPA review, Affected states review, and
Prevention of Significant Deterioration (PSD) and	a Public petition period for every FOP.
Nonattainment (NA) permits for major sources.	
Permits have a table listing maximum emission	Permit has an applicable requirements table and
limits for pollutants	Periodic Monitoring (PM) / Compliance Assurance
	Monitoring (CAM) tables which document applicable
D :: 1 1: 1	monitoring requirements.
Permits can be altered or amended upon	Permits can be revised through several revision
application by company. Permits must be issued	processes, which provide for different levels of public
before construction or modification of facilities	notice and opportunity to comment. Changes that
can begin.	would be significant revisions require that a revised
NCD	permit be issued before those changes can be operated.
NSR permits are issued independent of FOP	FOP are independent of NSR permits, but contain a list
requirements.	of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

 $www.tceq. texas.gov/permitting/air/permitbyrule/historical_rules/old106 list/index 106. html$

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.		
Authorization No.: 101179	Issuance Date: 03/12/2012	
Authorization No.: 4751	Issuance Date: 12/20/2006	
Authorization No.: 5040	Issuance Date: 12/12/2012	
Authorization No.: 80295	Issuance Date: 12/07/2016	
Authorization No.: 83843	Issuance Date: 06/27/2011	
Permits By Rule (30 TAC Chapter 106) for the Application Area		
Number: 106.261	Version No./Date: 11/01/2003	
Number: 106.262	Version No./Date: 11/01/2003	
Number: 106.263	Version No./Date: 11/01/2001	
Number: 106.264	Version No./Date: 09/04/2000	
Number: 106.371	Version No./Date: 09/04/2000	
Number: 106.373	Version No./Date: 09/04/2000	
Number: 106.454	Version No./Date: 11/01/2001	
Number: 106.472	Version No./Date: 09/04/2000	
Number: 106.476	Version No./Date: 09/04/2000	
Number: 106.478	Version No./Date: 09/04/2000	
Number: 106.511	Version No./Date: 09/04/2000	

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

- 1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
- 2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
- 3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information		
ID No.: AAFLAREV		
Control Device ID No.: AAFLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-6	
Pollutant: VOC	Main Standard: § 115.121(a)(1)	
Monitoring Information		

Indicator: Pilot Flame

Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if there is no pilot flame.

Unit/Group/Process Information		
ID No.: AAFLAREV		
Control Device ID No.: AAFLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-7	
Pollutant: VOC	Main Standard: § 115.121(a)(2)	
Monitoring Information		

Indicator: Pilot Flame

Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if there is no pilot flame.

Unit/Group/Process Information		
ID No.: VAFLAREV		
Control Device ID No.: VAFLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2	
Pollutant: VOC	Main Standard: § 115.121(a)(1)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		

Averaging Period: n/a

Deviation Limit: Absence of a pilot flame.

Unit/Group/Process Information		
ID No.: VAFLAREV		
Control Device ID No.: VAFLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-5	
Pollutant: VOC	Main Standard: § 115.121(a)(2)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		

Averaging Period: n/a

Deviation Limit: Absence of a pilot flame.

Unit/Group/Process Information		
ID No.: VAFLAREV		
Control Device ID No.: VAFLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5722-1	
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)	
Monitoring Information		
Indicator: Pilot Flame		

Indicator: Pilot Flame

Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if there is no pilot flame.

Periodic Monitoring:

operating in accordance with its design.

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information		
ID No.: DEGR1		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-1	
Pollutant: VOC	Main Standard: § 115.412(1)	
Monitoring Information		
Indicator: Visual Inspection		
Minimum Frequency: Monthly		
Averaging Period: n/a		
Deviation Limit: It is a deviation if monitoring data indicates that the cold solvent cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1)(A)-(F).		
Basis of monitoring:		

The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the

cleaner records of monthly inspections of equipment is an effective way to ensure that the system is

Unit/Group/Process Information		
ID No.: VAV5112		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-5	
Pollutant: VOC	Main Standard: § 115.112(e)(1)	

Indicator: Structural Integrity of the Pipe
Minimum Frequency: Emptied and degassed

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if the repairs are not completed prior to refilling the storage vessel.

Basis of monitoring:

Unit/Group/Process Information			
ID No.: VAV5112			
Control Device ID No.: N/A	Control Device Type: N/A		
Applicable Regulatory Requirement			
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-5		
Pollutant: VOC	Main Standard: § 115.112(e)(1)		

Indicator: Record of Tank Construction Specifications

Minimum Frequency: n/a

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if the fill pipe is not submerged.

Basis of monitoring:

Unit/Group/Process Information		
ID No.: VAV591		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-5	
Pollutant: VOC	Main Standard: § 115.112(e)(1)	

Indicator: Structural Integrity of the Pipe
Minimum Frequency: Emptied and degassed

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if the repairs are not completed prior to refilling the storage vessel.

Basis of monitoring:

Unit/Group/Process Information	
ID No.: VAV591	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-5
Pollutant: VOC	Main Standard: § 115.112(e)(1)

Indicator: Record of Tank Construction Specifications

Minimum Frequency: n/a

Averaging Period: n/a

Deviation Limit: It shall be considered a deviation if the fill pipe is not submerged.

Basis of monitoring:

Available Unit Attribute Forms

- OP-UA1 Miscellaneous and Generic Unit Attributes
- OP-UA2 Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 Storage Tank/Vessel Attributes
- OP-UA4 Loading/Unloading Operations Attributes
- OP-UA5 Process Heater/Furnace Attributes
- OP-UA6 Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 Flare Attributes
- OP-UA8 Coal Preparation Plant Attributes
- OP-UA9 Nonmetallic Mineral Process Plant Attributes
- OP-UA10 Gas Sweetening/Sulfur Recovery Unit Attributes
- OP-UA11 Stationary Turbine Attributes
- OP-UA12 Fugitive Emission Unit Attributes
- OP-UA13 Industrial Process Cooling Tower Attributes
- OP-UA14 Water Separator Attributes
- OP-UA15 Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 Solvent Degreasing Machine Attributes
- OP-UA17 Distillation Unit Attributes
- OP-UA18 Surface Coating Operations Attributes
- OP-UA19 Wastewater Unit Attributes
- OP-UA20 Asphalt Operations Attributes
- OP-UA21 Grain Elevator Attributes
- OP-UA22 Printing Attributes
- OP-UA24 Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 Synthetic Fiber Production Attributes
- OP-UA26 Electroplating and Anodizing Unit Attributes
- OP-UA27 Nitric Acid Manufacturing Attributes
- OP-UA28 Polymer Manufacturing Attributes
- OP-UA29 Glass Manufacturing Unit Attributes
- OP-UA30 Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
- OP-UA31 Lead Smelting Attributes
- OP-UA32 Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 Metallic Mineral Processing Plant Attributes
- OP-UA34 Pharmaceutical Manufacturing
- OP-UA35 Incinerator Attributes
- OP-UA36 Steel Plant Unit Attributes
- OP-UA37 Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 Sterilization Source Attributes
- OP-UA40 Ferroalloy Production Facility Attributes
- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur
- **Recovery Plant Attributes**
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes

- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- OP-UA58 Treatment Process Attributes
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes